

Facing Surgery for GERD (Gastroesophageal Reflux Disease)?

Learn about minimally invasive *da Vinci*® Surgery

The Condition:

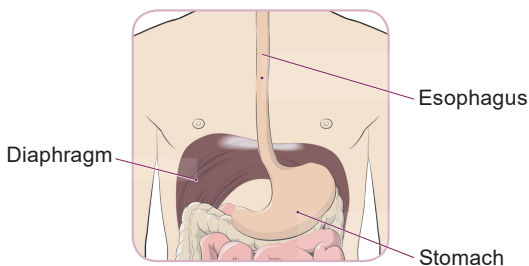
GERD, Hiatal Hernia

Gastroesophageal reflux disease or GERD is a common digestive disease that occurs when stomach acid flows back into your esophagus and irritates the lining. GERD can result when your lower esophageal sphincter (valve between your esophagus and stomach) weakens and causes stomach contents to rise (reflux).

The most common signs and symptoms of GERD are frequent acid reflux and heartburn. Other symptoms include a dry cough, wheezing, asthma, pneumonia, nausea and vomiting. An estimated 5-7% of the world's population suffer from GERD.

GERD can be caused by an abnormality in the body such as a hiatal hernia. Hiatal hernias occur when part of your stomach moves up toward your diaphragm or chest. Other causes of GERD include: obesity, pregnancy, certain medications, smoking, or second-hand smoke. GERD affects men and women equally and can strike at any age.

Most people can manage the symptoms of GERD with lifestyle changes and medications. For others, these remedies may offer only temporary relief.



The Digestive Tract

The Surgery:

Nissen Fundoplication

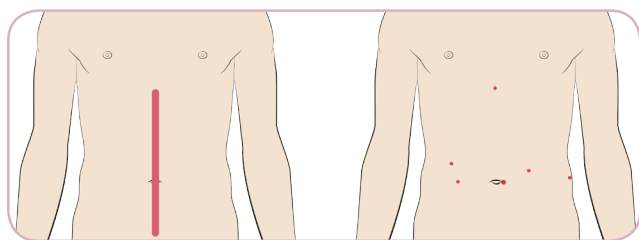
Treatment options often depend on how severe your symptoms are, your age and overall health. If medicine and lifestyle changes do not ease your symptoms, your doctor may recommend surgery.

Surgery to repair hiatal hernia or reduce/stop reflux in patients diagnosed with GERD is called Nissen fundoplication. This surgery involves tightening the lower esophageal sphincter by wrapping the top of the stomach around the outside of the lower esophagus.

Your doctor may perform the procedure using open surgery, laparoscopy or robotically-assisted da Vinci Surgery.

In open surgery, the surgeon makes an incision in your abdomen. The incision must be large enough for your surgeon to fit his or her hands and surgical instruments inside your body. This allows doctors to see and touch your organs as they operate.

Laparoscopy or laparoscopic surgery is minimally invasive. This means your surgeon operates through a few small incisions in the abdomen using long-handled instruments and a tiny camera. The camera sends images to a video monitor in the operating room to guide doctors as they operate. There is another minimally invasive surgical option for patients facing surgery: state-of-the-art *da Vinci* Surgery.



Open Surgery
Incision

da Vinci Surgery/
Laparoscopy Incisions

da Vinci Surgery :

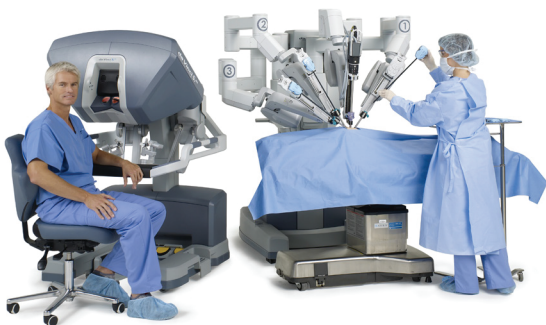
A Minimally Invasive Surgical Option

If your doctor recommends surgery for GERD and its symptoms, ask about minimally invasive *da Vinci* Surgery.

Using the *da Vinci* System, your surgeon makes a few small incisions - similar to traditional laparoscopy. The *da Vinci* System features a magnified 3D HD vision system and tiny wristed instruments that bend and rotate far greater than the human wrist. These features enable surgeons to operate with enhanced vision, precision, dexterity and control.

As a result of its advanced technology, *da Vinci* Surgery offers the following potential benefits compared to traditional laparoscopy:

- Similar rate of complications during surgery and fewer after surgery
- Less acid reflux after surgery



Risks & Considerations Related to Any Nissen Fundoplication:

- Injury to nearby organs/tissues
- Difficulty swallowing
- Pneumonia